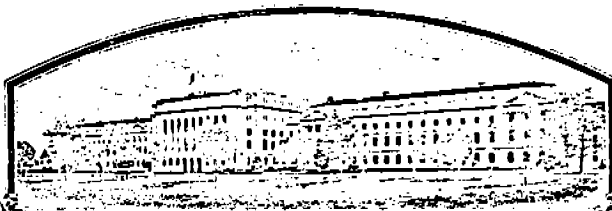


No.

7200101



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Coker's Pedigreed Seed Company

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS PERMITTED BY THE OWNER OF THE RIGHTS. (34 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COTTON

'Coker 5110'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 28th day of June in the year of our Lord one thousand nine hundred and seventy-four

Attest

L. J. Rollin
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Earl L. Buttz
Secretary of Agriculture

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1. VARIETY NAME OR TEMPORARY DESIGNATION		2. KIND NAME	FOR OFFICIAL USE ONLY	
Coker 5110		Cotton	PVPO NUMBER	72101
3. GENUS AND SPECIES NAME		4. FAMILY NAME (Botanical)	FILING DATE	TIME
Gossypium hirsutum		Malvaceae (mallow)	3.6.72	10 A.M.
		5. DATE OF DETERMINATION	FEE RECEIVED	CHARGES
		January 1969	\$ 750.00	
6. NAME OF APPLICANT(S)		7. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP)		8. TELEPHONE AREA CODE AND NUMBER
Coker's Pedigreed Seed Co.		P.O. Box 340, Hartsville, S.C. 29550		803-332-7531
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.)			10. STATE OF INCORPORATION	11. DATE OF INCORPORATION
Corporation			South Carolina	June 12, 1918

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

Henry W. Webb, Director
Cotton-Soybean Division
Coker's Pedigreed Seed Company
P.O. Box 340
Hartsville, South Carolina 29550

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

☒ 12A. Exhibit A, Origin and Breeding History of the Variety (See Section 52, P.L. 91-577)☒ 12B. Exhibit B, Botanical Description of the Variety☐ 12C. Exhibit C, Objective Description of the Variety☒ 12D. Exhibit D, Data Indicative of Novelty☒ 12E. Exhibit E, Statement of the Basis of Applicant's Ownership

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable. (See Section 52, P.L. 91-577).

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? (See Section 83(a), P.L. 91-577) (If "Yes," answer 14B and 14C below.) ☒ YES ☐ NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? ☒ YES ☐ NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed?

Foundation (1 year), Registered (1 year), Certified

Applicant is informed that false representation herein can jeopardize protection and result in penalties. (1 year)

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act (P.L. 91-577).

February 29, 1972

(DATE)



(SIGNATURE OF APPLICANT)

Robert R. Coker, President

1

(SIGNATURE OF APPLICANT)

(DATE)

13 A. EXHIBIT A, ORIGIN AND BREEDING HISTORY OF VARIETY - COKER 5110

<u>Stage</u>	<u>Year</u>	<u>Activity</u>
1	1948	Cross; Coker 100 Staple X Deltapine 15
2	1950-1959	Line selection program thru successive generations produced the strain Coker 60-111.
3	1960-1965	Line selections in Coker 60-111 produced the strain Coker 65-110, later named Coker 5110.
4	1965-1971	Coker 65-110 evaluated in replicated yield trials and disease screening trials across the Cotton Belt. Concurrent seed increase accomplished to produce foundation seed during 1970 season in South Carolina. Continued reselection within Coker 65-110 has produced maintenance strains which will be used to produce foundation seed in years ahead.
5	1971	Produced certified seed of Coker 5110 under contract with Canyon Gin, Lubbock, Texas, for distribution to farmers for 1972 plantings, in that area.

Variants: Occasional variants are to be found in any cotton variety due to frequency of natural cross pollination. Although these are relatively infrequent in Coker 5110 we have observed a few plants that generally tend to be somewhat more determinate and slightly earlier. Bolls may be somewhat smaller.

13 B. EXHIBIT B, BOTANICAL DESCRIPTION OF THE VARIETY - COKER 5110

1. a. Seed: Seed of Coker 5110 are medium large in size with a seed index averaging about 12.0. The raw, gin run seed have a rather heavy covering of linters or fuzz fibers.

The seed coat is very tough and usually resists fracturing and dehulling in the ginning and delinting processes.

The acid delinted seed is quite uniform in size and shape averaging about 8 - 10 seed per gram.
- b. Young Plant: The plant is very vigorous in seedling stage growing very rapidly and developing rather large leaves. The young plant usually starts flowering one to three days later than Coker 310 has longer internodes and consequently fruits somewhat slower than Coker 310.
2. Mature Plant Characteristics:
 - a. Stalk: Erect, vigorous, excellent resistance to lodging.
 - b. Foliage: Medium heavy, medium large leaves, medium lobed.
 - c. Bolls: Medium oblong to slightly pointed. Averages about 68 - 72 bolls per pound of seed cotton.
 - d. Plant Type: Open, well balanced, Intermediate. Slightly more indeterminate than Coker 310.
 - e. Storm Resistance: Excellent for open boll type. Better than most rain belt varieties.
 - f. Wilt Tolerance: Very good tolerance to fusarium and good tolerance to verticillium wilt.
 - g. Maturity: Usually 2 - 5 days later than Coker 310.
3. Lint Characteristics, under average seasonal conditions:
 - a. Length: Averages $1 \frac{1}{16}$ - $1 \frac{1}{8}$.
 - b. Fiber Strength: 78,000 - 85,000 p.s.i., slightly weaker than Coker 310.
 - c. Micronaire: Averages 3.9 - 4.4, somewhat lower than Coker 310.
 - d. Yarn Strength: 22's yarns average about 112 - 120 pounds.
 - e. Gin Turnout (lint percent): 36 - 39% approximately .4 - .8% units lower than Coker 310.
 - f. Coker 5110 is inclined towards quite vigorous early season growth and has demonstrated a relatively high degree of tolerance to conditions of limited moisture.

13 D. EXHIBIT D, DATA INDICATIVE OF NOVELTY - COKER 5110

1. Productivity: Performance Trials and Observational and Increase block plantings across the belt since 1965 have clearly demonstrated the superior performance potential of Coker 5110. It has exceptionally wide adaptation to soils, climate and management practices.

The data on agronomic and fiber characteristics presented in attached tables further illustrates these traits as determined in Coker's trials in South Carolina and the Mississippi Valley in 1970 and 1971.

These performance data in combination with disease resistance and drought tolerance combine to contribute to outstanding overall farmer performance.

Coker 5110 is exceptionally well adapted to hand, spindle and stripper harvesting. Primary area of adaptation of Coker 5110 is the High Plains of Texas in the vicinity of Lubbock and areas southward where moisture is generally limited.

Samples of gin run seed and acid delinted seed are available.

Performance Summary; Four Coker Cotton Varieties, Southeast and Mid-South, 1970-71

(All data are from Coker research plots, summarized by Coker personnel)

Variety	Yield Lint: lbs./Acre			Fiber Data (Average for years and areas)			
	2-Year Average, 1970-71			Gin	Span Length	Fineness	Fiber
	South East	Mid South	2 - Area Average	Turnout %	2.5% ins.	Micronaire Units	Strength P.S.I.
Coker 201	953	919	936	38.7	1.15	4.44	82,400
Coker 310	934	1015	975	38.0	1.22	4.37	85,500
Coker 312	960	1122	1041	39.3	1.22	4.38	83,200
Coker 5110	929	1048	989	37.5	1.21	4.11	82,100

Above data are taken from 10 replicated test plantings of Coker varieties and strains.

1. Southeast (Hartsville, S.C.): 1970, 2 tests; 1971, 2 tests.
2. Mid-South (Miss., Ark. and Mo.): 1970, 3 tests; 1971, 3 tests.

EXHIBIT D: PARTICULARS OF TRIAL PERFORMANCE, COKER 5110, PV. No. 72101

Novelty is based on the following unique characters and/or combinations of characters which are of considerable significance in the primary area of adaptation of Coker 5110.

Coker 5110 most closely resembles Coker 310, except that it has:

1. Later maturity by 6-8 days.
2. More tolerance to Verticillium wilt. (see following data)

Variety	Verticillium wilt rating
Coker 310	3.5
Coker 5110	2.7

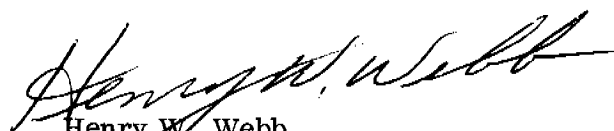
Verticillium tolerance ratings: 1-5

1 = no wilt

5 = sever wilt

3. The combination of slower development and increased Verticillium wilt tolerance combined with overall plant vigor contribute to a relatively high level of drought tolerance. This is of significant value in areas of the High Plains where water is frequently a major limiting factor in production.
4. Approximately .04 inches shorter fiber (a full 1/32 inch).
5. Approximately 1-2 percent lower lint percent or "gin turnout".


Note: All data taken from Coker's performance trials, Lubbock, Texas.


Henry W. Webb
Director Cotton Division
Coker's Pedigreed Seed Co.

13 E. EXHIBIT E, STATEMENT OF THE BASIS OF APPLICANTS OWNERSHIP, COKER 5110

The variety, Coker 5110, is the property of Coker's Pedigreed Seed Company by virtue of the fact that the original cross and all subsequent developmental research and related activities pertaining to the development of Coker 5110 were performed by company personnel and utilizing company finances and facilities.

COKER'S PEDIGREED SEED COMPANY

A handwritten signature in dark ink, appearing to read "Henry W. Webb", is written over the typed name.

Henry W. Webb
Director, Cotton-Soybean Division
February 29, 1972

TRANSFER OF OWNERSHIP

In consideration of the sale of the Lubbock Cotton Research Station to Seedco Corporation, Coker's Pedigreed Seed Company does hereby convey to Seedco Corporation, free from all encumbrances, ownership of the following protected varieties:

<u>Variety Name</u>	<u>Plant Variety Certificate No.</u>	<u>Issue Date</u>
Coker 312	7200100	July 26, 1974
Coker 500	8300078	August 31, 1983
Coker 4360	8200071	December 30, 1982
Coker 5110	7200101	June 28, 1974

COKER'S PEDIGREED SEED COMPANY

By: E. Joe Dahmer
E. Joe Dahmer, President

Date: 9/24/84

Sworn and subscribed to before me
this 24 day of September, 1984.

Mary M. Cooley
Notary Public for South Carolina

My Commission Expires August 25, 1991

OBJECTIVE DESCRIPTION OF VARIETY
COTTON (GOSSYPIMUM SPP.)Data developed at Coker's
Lubbock, Texas Research Program

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)

Coker's Pedigreed Seed Co.

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

P. O. Box 340
Hartsville, S. C. 29550

FOR OFFICIAL USE ONLY

PVPO NUMBER

72101

VARIETY NAME OR TEMPORARY
DESIGNATION

Coker 5110

Place the appropriate number that describes the varietal character of this variety in the boxes below.

Place a zero in first box (e.g., or) when number is either 99 or less or 9 or less.

1. SPECIES:

1 = GOSSYPIMUM HIRSUTUM

2 = GOSSYPIMUM BARBADENSE

2. AREA(S) OF ADAPTION (0 = Not Tested, 1 = Not Adapted, 2 = Adapted):

EASTERN

DELTA

CENTRAL

HIGH PLAINS

EL PASO AREA

WESTERN LOW HOT VALLEYS

SAN JOAQUIN

OTHER (Specify)

3. MATURITY (50% Open Boll):

NO. OF DAYS EARLIER THAN

1 = COKER 310

2 = DELTAPINE 16

3 = STONEVILLE 213

NO. OF DAYS LATER THAN

4 = PAYMASTER 111

5 = ACALA 1517-70

6 = ACALA SJ-1

7 = LANKART 57

8 = OTHER (Specify)

4. PLANT HABIT:

1 = SPREADING

2 = INTERMEDIATE

3 = COMPACT

1 = FOLIAGE SPARSE

2 = DENSE

3 = OTHER (Specify)

Med, dense

5. PLANT HEIGHT:

CM. SHORTER THAN

1 = COKER 310

2 = DELTAPINE 16

3 = STONEVILLE 213

CM. TALLER THAN

4 = PAYMASTER 111

5 = ACALA 1517-70

6 = ACALA SJ-1

7 = LANKART 57

8 = OTHER (Specify)

6. MAIN STEM:

1 = LAX

2 = ASCENDING

3 = ERECT

N. A. (Not available)

CM. TO FIRST
FRUITING BRANCHNO. OF NODES TO FIRST FRUITING BRANCH
(from cotyledonary node)

7. LEAF: N. A.

CM. WIDTH OF
WIDEST LEAVES
AT MATURITY

8. LEAF PUBESCENCE:

1 = GLABROUS (HAIRS AS SPARSE AS D₂ SMOOTH)

2 = SMOOTH LEAF (DELTAPINE SMOOTH LEAF)

3 = PUBESCENT (STONEVILLE 213)

4 = HEAVY PUBESCENCE (H₁ OR H₂)

5 = OTHER (Specify)

9. LEAF COLOR:

1 = VIRESCENT YELLOW

2 = LIGHT GREEN

3 = DARK GREEN (Acala-442)

4 = RED

5 = OTHER (Specify)

10. LEAF TYPE:

1 = NORMAL

2 = OKRA

3 = SUPER OKRA

4 = OTHER (Specify)

11. FLOWER:

1 = NECTARILESS

2 = NECTARIED

Petals:

1 = CREAM

2 = YELLOW

Pollen:

1 = CREAM

2 = YELLOW

~~3 = Mixed~~

12. FRUITING BRANCH TYPE:

1 = CLUSTER

2 = SHORT

3 = NORMAL

1 = DETERMINATE

2 = INDETERMINATE

3 = Intermediate

13. GOSSYPOL CONDITION:

1 = GLANDLESS

2 = REDUCED GLANDS

3 = NORMAL GLANDS

1 = NORMAL BUD GOSSYPOL

2 = HIGH BUD GOSSYPOL

14. SEEDS:

±

SEED INDEX

(Fuzzy seed basis)

Seed Fuzz:

1 = SPARSE (GREGG 35)

2 = MODERATE (DPL-16)

3 = HEAVY (ACALA SJ-1)

4 = OTHER (Specify)

4

15. BOLLS:

<input type="checkbox"/> 2	Locules: 1 = 3-4 2 = 4-5	<input type="checkbox"/> 3 <input type="checkbox"/> 6	NO. SEEDS PER BOLL	<input type="checkbox"/> 3 <input type="checkbox"/> 6 <input type="checkbox"/> 5	LINT PERCENT	<input type="checkbox"/> N.A.	MM. DIAMETER
<input type="checkbox"/> 1	Pitted: 1 = NONE 2 = FINELY 3 = COARSELY	<input type="checkbox"/> 6 <input type="checkbox"/> 2 <input type="checkbox"/> 0	GRAMS SEED COTTON PER BOLL	<input type="checkbox"/> 2	Breadth: 1 = BROADER AT BASE 2 = BROADER AT MIDDLE		
<input type="checkbox"/> 3	Type: 1 = STORMPROOF (WESTBURN 70) 2 = STORM RESISTANT (LANKART 57) 3 = OPEN (DELTAPINE 16)	<input type="checkbox"/> 3	Shape: 1 = LENGTH < WIDTH 2 = LENGTH = WIDTH 3 = LENGTH > WIDTH				

16. BRACTEOLAS:

<input type="checkbox"/> 3	Breadth: 1 = LENGTH < WIDTH 2 = LENGTH = WIDTH 3 = LENGTH > WIDTH	<input type="checkbox"/> 3	Teeth: 1 = 3-4 2 = 5-7 3 = 8-10 4 = OTHER (Specify) _____
<input type="checkbox"/> 1	Teeth: 1 = FINE 2 = COARSE		

17. YIELD: Compared to—

<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	PERCENT LESS THAN	<input type="checkbox"/> 1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213
<input type="checkbox"/> 1 <input type="checkbox"/> 0 <input type="checkbox"/> 0	PERCENT MORE THAN	<input type="checkbox"/> 4 = PAYMASTER 111 5 = ACALA 1517-70
		<input type="checkbox"/> 6 = ACALA SJ-1 7 = LANKART 57

18. FIBER LENGTH (Complete one or more of the following and give the means):

<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> N.A.	SPAN LENGTH 50%	<input type="checkbox"/> 1 <input type="checkbox"/> 0 <input type="checkbox"/> 9	SPAN LENGTH 2.5%	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> N.A.	U.H.M. LENGTH
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	MEAN LENGTH	<input type="checkbox"/> 3 <input type="checkbox"/> 4	STAPLE LENGTH 32nd INCHES		
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	UNIFORMITY RATIO (MEAN/U.H.M.)	<input type="checkbox"/> 4 <input type="checkbox"/> 5	UNIFORMITY INDEX (50% SPAN/2.5% SPAN)		

19. FIBER STRENGTH AND ELONGATION:

<input type="checkbox"/> 0 <input type="checkbox"/> 8 <input type="checkbox"/> 2	1,000 P.S.I.	<input type="checkbox"/> 0 <input type="checkbox"/> 7 <input type="checkbox"/> 8	ELONGATION E ₁	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> N.A.	STILOMETER T ₀
<input type="checkbox"/> 4 <input type="checkbox"/> 0 <input type="checkbox"/> 0	MICRONAIRE READING	<input type="checkbox"/> 1 <input type="checkbox"/> 1 <input type="checkbox"/> 6	YARN STRENGTH (Give test method) Min. spln	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	STILOMETER T ₁

20. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant) 3 = Tolerant

<input type="checkbox"/> 3	VERTICILLIUM WILT	<input type="checkbox"/> 3	FUSARIUM WILT	<input type="checkbox"/> 1	ROOT KNOT NEMATODE	<input type="checkbox"/> 1	BACTERIAL BLIGHT (Race 1)
<input type="checkbox"/> 1	BACTERIAL BLIGHT (Race 2)	<input type="checkbox"/> 1	ASCOCHYTA BLIGHT	<input type="checkbox"/> 1	PHYMATOTRICHUM ROOT ROT	<input type="checkbox"/> 1	RHIZOCTONIA
<input type="checkbox"/> 0	ANTHRACNOSE	<input type="checkbox"/> 0	RUST	<input type="checkbox"/>	OTHER (Specify) _____		

21. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

<input type="checkbox"/> 1	BOLL WEEVIL	<input type="checkbox"/> 1	APHID	<input type="checkbox"/> 1	FLEAHOPPER	<input type="checkbox"/> 1	LEAFWORM
<input type="checkbox"/> 1	FALL ARMYWORM	<input type="checkbox"/> 1	GRASSHOPPER	<input type="checkbox"/> 1	LYGUS	<input type="checkbox"/> 1	PINK BOLLWORM
<input type="checkbox"/> 1	STINKBUG	<input type="checkbox"/> 1	THRIP	<input type="checkbox"/> 1	CUTWORM	<input type="checkbox"/> 1	SPIDERMITTE
<input type="checkbox"/>	OTHER (Specify) _____						

REFERENCES: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

- (1) Brown, Harry B., and J. O. Ware, 1958, *Cotton*, McGraw-Hill Book Company, Inc., New York.
- (2) Lewis, C. F., and H. H. Ramey, Jr., 1971, *1970 Regional Cotton Variety Tests*, ARS 34-130, United States Department of Agriculture.

COLORS: Nickerson's or any recognized color fan may be used to determine flower color of the described variety.